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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,839	04/13/2004	Jason Wolfson	14657-007001	5536

26161 7590 11/27/2006

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EXAMINER
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JIANG, CHEN WEN

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/823,839	WOLFSON, JASON	
	Examiner	Art Unit	
	Chen-Wen Jiang	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 82-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 82-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060922</u>  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6,11,12,83 and 85-90 are rejected under 35 U.S.C. 102(b) as being anticipated by Rudd (U.S. Patent Number 6,431,268).

Rudd discloses an air distribution fan and outside air damper recycling control. Referring to Fig.1, the system is wired in series between the thermostat or humidistat fan control terminal 111, and the fan relay terminal 142, of the air conditioner system air distribution fan, and is wired in parallel with the thermostat heat control terminal 122. When the fan control terminal 111, is energized, the 24 Vac relay coil 116, closes normally open (NO) contact 118, and opens normally closed (NC) contact 119, which energizes the 24 Vac relay coil 123 and blocks current flow back to the thermostat heat control terminal 112. When the thermostat heat control terminal 112, is energized, the 24 Vac relay coil 116, remains de-energized and the 24 Vac relay coil 123, is energized through NC contact 119, while NO contact, 118 blocks current flow back to the fan control terminal 111. When either the fan control terminal 111, or the thermostat heat control terminal 112, are energized, the line 121 is energized, and the 24 Vac relay coil 123, is energizes, which closes NO contact 127, which energizes the fan relay terminal 142, of the air conditioning system air distribution fan. At the same time, NC contacts 124 and 126, are opened which de-energizes and resets the solid-state recycling timer 134. When both the fan control terminal 111,

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and the thermostat heat control terminal 112, are de-energized, the line 121 is de-energized, and the 24 Vac relay coil 123, is de-energized, which opens the NO contact 127, cutting off current flow to the fan relay terminal 142. At the same time, NC contacts 124 and 126, close, which energizes the solid-state recycling timer 134. While the recycling timer 134, is energized, the timer will continuously cycle through a preselected OFF delay, during which time the switched output terminal 149, and fan relay terminal 142, are de-energized, and a preselected ON delay, during which time the switched output terminal 149, and fan relay terminal 142, are energized. Referring to Fig.2, component 217 allows selection of the fan recycling control OFF delay time period, whereby, this delay time period begins at the end of the last operation of the air distribution fan or the last operation of the heating apparatus of the air conditioning system. Component 218 allows selection of the fan recycling control ON delay time period, whereby, this delay time period begins at the end of the said OFF delay time period. Component 219 allows selection of the outside air damper cycle time period, whereby, the cycle time period refers to the time that the damper output terminal 229, will cycle between, first energized then de-energized, and so on, for as long as the fan output terminal 228, is energized.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rudd (U.S. Patent Number 6,431,268) in view of Moriya et al. (U.S. Patent Number 5,230,466).

Rudd discloses the invention substantially as claimed. However, Rudd does not disclose exhaust fan in the system. Moriya et al discloses exhaust fan in the same field of endeavor for the purpose of temperature and humidity control. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rudd with an exhaust fan in view of Moriya et al so as to improve thermal efficiency.

5. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudd (U.S. Patent Number 6,431,268) in view of Smith (U.S. Patent Number 4,437,608).

Rudd discloses the invention substantially as claimed. However, Rudd does not disclose intake flow control in the system. Smith discloses intake flow control in the same field of endeavor for the purpose of temperature and humidity control. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rudd with intake flow control in view of Smith so as to achieve desired temperature and humidity.

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6. Claims 7-10,82 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudd (U.S. Patent Number 6,431,268) in view of Kubota (JP07332737).

Rudd discloses the invention substantially as claimed. However, Rudd does not disclose intake flow control in the system. Kubota discloses intake/exhaust flow control in the same field of endeavor for the purpose of temperature and humidity control. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rudd with intake/exhaust flow control in view of Kubota so as to achieve desired temperature and humidity.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chen-Wen Jiang  
Primary Examiner

